

CLAIMS

What is claimed is:

1. System for identification of compounds in a mixture based on ion mobility, the system comprising:
 - 5 a pair of substrates,
said substrates mated together facing each other over a gap,
said substrates forming at least one radial flow path in said gap,
ion filter electrodes on said substrates facing each other over said gap
and defining at least one ion filter, and
 - 10 ions representing compounds in a mixture being filtered by said ion filter
according to mobility characteristics as the ions travel radially along said flow
path between said filter electrodes in said gap, ion species having said
characteristics passing radially through said filter.
- 15 2. The system of claim 1 wherein said filter filters ion species based on differences
in ion mobility, wherein said substrates define at least one filter electrode on
each substrate facing each other over said gap in said radial flow path, and
wherein said flow path accommodates said flow of said ions, said ions traveling
in said radial flow path between said filter electrodes, selected species of said
20 ions being passed by said ion filter according to differences in ion mobility
behavior, said passed species traveling radially in said flow path out of said filter
for detection.
3. The system of claim 1 further comprising a spacer, said gap being defined by
25 said spacer.